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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,127	09/10/2003	Qing Yang	022193-0140411US	3572

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TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

OPARE ABETIA, JOSEPH C

ART UNIT PAPER NUMBER

2165

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/659,127	YANG, QING	
	Examiner	Art Unit	
	Joseph C. Opare-Abetia	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/09/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Yuval Ofek (U.S. Patent No. 5857208 and Ofek hereinafter).

With respect to claims 1 and 12, Ofek discloses an information backup system, comprising: A. a local computing system including (i) a local disk (i.e., “...*the local system 10, includes, as its major components, a host system 40, a system memory 41 and storage device sets 42 and 43* ”. The preceding text clearly indicates that disk is being used in the system. Which in this case, is a storage device)(col. 5, lines 27-29); and (ii) a local device driver responsive to requests from a local application executing on said local computing system, for selectively processing calls to said local disk or a remote disk for backup of data resident on said local disk (i.e., “*A backup controller and device connect to the secondary storage device through its bus. Normally the primary controller writes data to both the primary and secondary data storage devices. The CPU initiates a backup through the primary controller*”. **Device driver** is defined on answers.com, as it is a program routine that links the operating system to a peripheral device. The preceding text clearly indicates that there

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is a communications between two devices which in this case is the remote system and a local system, therefore drivers for both systems is needed in order to use them)(col. 2 lines 12-16); and B. a remote computing system including (i) said remote disk (i.e., “*The remote system 11, like the local system 10, includes, as its major components, a host system 40, a system memory 41 and storage device sets 42 and 43*”). The preceding text clearly indicates that disk is being used in the system. Which in this case is a storage device)(col. 5, lines 27-29, fig. 1); and (ii) a remote device driver responsive to calls from either said local device driver or calls from a remote application executing on said remote computing system, wherein calls from said local device driver are processed to perform backup operations to said remote disk of data resident on said local computing system (i.e., “*A backup controller and device connect to the secondary storage device through its bus. Normally the primary controller writes data to both the primary and secondary data storage devices. The CPU initiates a backup through the primary controller*”). **Device driver** is defined on answers.com as it is a program routine that links the operating system to a peripheral device .The preceding text clearly indicates that there is a communications between two devices which in this case is the remote system and a local system, therefore drivers for both systems is needed in order to use them)(col. 2 lines 12-16).

With respect to claims 2 and 13, Ofek discloses wherein said local device driver communicates with a local disk cache disk driver to perform caching in said local computing system (i.e., “*Each of the local and remote systems 10 and 11 may comprise a*

Symmetry integrated cached disk". The preceding text clearly indicates that a cache disk is being used in the system to perform caching in the local system)(col. 5, lines 44-45).

With respect to claims 3 and 14, Ofek discloses wherein said local device driver communicates with a network interface card driver on said local computing system to create a connection with said remote computing system (i.e., "*The local system 10 in FIG. 1 additionally includes a remote link director (RLD) 30 for controlling transfers of data between the local system 10 and the remote system 11 over the communication link 12*"). The preceding text and figure clearly indicates that a network interface driver is being used to connect the local system to the remote system)(col. 5, lines 16-19).

With respect to claims 4 and 15, Ofek discloses wherein said local device driver does not require any changes to an operating system executing on said local computing system (i.e., "*without interfering with the operations on a data processing system at a local site*"). The preceding text clearly indicates that there are no changes being made during the execution on the local system)(col. 3 lines 51-54).

With respect to claims 5 and 16, Ofek discloses wherein said remote device driver communicates with said local device driver through a network interface card driver on said remote computing system (i.e., "*The local system 10 in FIG. 1 additionally includes a remote link director (RLD) 30 for controlling transfers of data between the local system 10 and the remote system 11 over the communication link 12*"). The preceding text and

figure clearly indicates that a network interface driver is being used to connect the local system to the remote system)(col. 5, lines 16-19).

With respect to claims 6 and 16, Ofek discloses wherein said remote driver does not require any changes to an operating system executing on said remote computing system (i.e., *"In a normal operating mode the local system 10 is the active system while the remote system 11 functions solely as a mirror. For example, when the system in FIG. 1 accommodates a database, the local system 10 generally processes applications including those that can effect changes to the database. For purposes of this description, it is assumed that the host system 13 issues a Channel Control Word (CCW) command including all the necessary parameters from which the system can transfer a data block to or from a particular location in the storage device sets 15 and 16. Other operating systems use other procedures. However, this invention is readily adapted to operate with such systems"*). The preceding text clearly indicates that there are no changes being made during the execution on the remote system)(col. 7, line 7-19).

With respect to claims 7 and 17, Ofek discloses wherein said remote device driver communicates with a local disk cache disk driver to perform caching in said remote computing system (i.e., *"Each of the local and remote systems 10 and 11 may comprise a Symmetry integrated cached disk"*). The preceding text clearly indicates that a cache disk is being used in the system to perform caching in the remote system)(col. 5, lines 44-45).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-11 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuval Ofek (U.S. Patent No. 5857208 and Ofek hereinafter), in view of Christopher M. Crawford (U.S. Patent No. 5771354 and Crawford hereinafter).

With respect to claims 8 and 18, Ofek discloses wherein said network interface card driver on said local computing system communicates with said remote computing system (i.e., *"The local system 10 in FIG. 1 additionally includes a remote link director (RLD) 30 for controlling transfers of data between the local system 10 and the remote system 11 over the communication link 12"*). The preceding text and figure clearly indicates that a network interface driver is being used to connect the local system to the remote system)(col. 5, lines 16-19).

Ofek does not disclose wherein said network interface card driver on said local computing system communicates with said remote computing system via the internet.

Crawford discloses wherein said network interface card driver on said local computing system communicates with said remote computing system via the Internet (i.e., *"Another way computer users commonly share information is by logging onto the*

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"Internet," a worldwide network of computers connected together". The preceding text clearly indicates that an Internet is being used to connect computers from different source)(col. 3, lines 13-14).

It would have been obvious to a person of ordinary skill in the art at the time of the applicant's invention to modify the teaching of Ofek with the teaching of Crawford to include local computing system communicates with said remote computing system via the internet with the motivation to being able to modify a database from anywhere (Crawford, col. 3, lines 13-14).

With respect to claims 9 and 19, Ofek discloses wherein said network interface card driver on said local computing system communicates with said remote computing system (i.e., *"The local system 10 in FIG. 1 additionally includes a remote link director (RLD) 30 for controlling transfers of data between the local system 10 and the remote system 11 over the communication link 12"*). The preceding text and figure clearly indicates that a network interface driver is being used to connect the local system to the remote system)(col. 5, lines 16-19).

Ofek does not discloses wherein said network interface card driver on said local computing system communicates with said remote computing system via a LAN or WAN.

Crawford discloses wherein said network interface card driver on said local computing system communicates with said remote computing system via a LAN or WAN (i.e., *"The Internet is similar to a LAN/WAN in that it was designed to allow many*

computers of differing types to interconnect and exchange information and programs". The preceding text clearly indicates that LAN or WAN are being used to connect different computers)(col. 3 lines 37-39).

It would have been obvious to a person of ordinary skill in the art at the time of the applicant's invention to modify the teaching of Ofek with the teaching of Crawford to include local computing system communicates with said remote computing system via a LAN or WAN with the motivation to being able to modify a database from anywhere (Crawford, col. 3 lines 37-39).

With respect to claims 10 and 20, Ofek discloses wherein said network interface card driver on said remote computing system communicates with said remote computing system (i.e., *"The local system 10 in FIG. 1 additionally includes a remote link director (RLD) 30 for controlling transfers of data between the local system 10 and the remote system 11 over the communication link 12"*). The preceding text and figure clearly indicates that a network interface driver is being used to connect the local system to the remote system)(col. 5, lines 16-19).

Ofek does not discloses wherein said network interface card driver on said local computing system communicates with said remote computing system via the Internet.

Crawford discloses wherein said network interface card driver on said local computing system communicates with said remote computing system via the Internet (i.e., *"Another way computer users commonly share information is by logging onto the "Internet," a worldwide network of computers connected together"*). The preceding text clearly

indicates that an Internet is being used to connect computers from different source)(col. 3, lines 13-14).

It would have been obvious to a person of ordinary skill in the art at the time of the applicant's invention to modify the teaching of Ofek with the teaching of Crawford to include local computing system communicates with said remote computing system via the internet with the motivation to being able to modify a database from anywhere (Crawford, col. 3, lines 13-14).

With respect to claims 11 and 22, Ofek discloses wherein said network interface card driver on said remote computing system communicates with said remote computing system (i.e., *"The local system 10 in FIG. 1 additionally includes a remote link director (RLD) 30 for controlling transfers of data between the local system 10 and the remote system 11 over the communication link 12"*). The preceding text and figure clearly indicates that a network interface driver is being used to connect the local system to the remote system)(col. 5, lines 16-19).

Ofek does not discloses wherein said network interface card driver on said local computing system communicates with said remote computing system via a LAN or WAN.

Crawford discloses wherein said network interface card driver on said local computing system communicates with said remote computing system via a LAN or WAN (i.e., *"The Internet is similar to a LAN/WAN in that it was designed to allow many computers of differing types to interconnect and exchange information and programs"*). The


preceding text clearly indicates that LAN or WAN are being used to connect different computers)(col. 3 lines 37-39).

It would have been obvious to a person of ordinary skill in the art at the time of the applicant's invention to modify the teaching of Ofek with the teaching of Crawford to include local computing system communicates with said remote computing system via a LAN or WAN with the motivation to being able to modify a database from anywhere (Crawford, col. 3 lines 37-39).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph C. Opare-Abetia whose telephone number is (571) 272-6594. The examiner can normally be reached on mon-fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JEFFREY A. GAFFIN can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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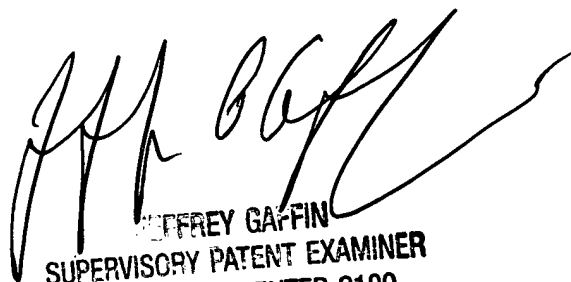
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Joseph Opare-Abetia

Patent Examiner

Art Unit 2165

Mar. 09, 2006



JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100